

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspito.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/465,056	12/16/1999	ROGER E. WEISS	PARI/981/US	8410	
75	90 04/18/2002				
BRIAN M. DINGMAN MIRICK, O'CONNELL, DEMALLIE & LOUGEE,LLP 100 FRONT STREET			EXAMINER		
			NGUYEN, TRUC T		
WORCESTER,	MA 01608		ART UNIT	PAPER NUMBER	
			2833		
			DATE MAILED: 04/18/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.		Applicant(s)				
	09/465,056		WEISS, ROGER E	Ξ.			
Office Action Summary	Examiner		Art Unit				
	Truc T. T. Nguye		2833				
Th MAILING DATE of this communication app ars on the cover she t with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status							
1) Responsive to communication(s) filed on <u>24 January 2002</u> .							
2a)⊠ This action is FINAL . 2b)□ TI	his action is non-f	nal.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims 4)⊠ Claim(s) <u>1-59</u> is/are pending in the applicatio	n						
4) \times Claim(s) $\frac{7-59}{1-59}$ is/are pending in the application. 4a) Of the above claim(s) $\frac{4}{10}$, $\frac{8}{10}$, $\frac{13-17}{10}$, $\frac{20-22}{10}$, $\frac{25-59}{10}$ is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6) Claim(s) 1-3,5-7,9-12,18,19,23 and 24 is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement. Application Papers							
9) ☐ The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12)☐ The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 	4) 5) 6)	Notice of Informal	y (PTO-413) Paper N Patent Application (P				

Art Unit: 2833

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-3, 7, 9, 12, 18, and 23-24 are rejected under 35 U.S.C. 102(e) as being 2. anticipated by Glatts (US 6,019,610).

Regarding claim 1, Glatts disclose (in Figure 11) an elastomeric device comprising: an elastomeric matrix (12);

one or more electrically conductive pathways (102) comprising a plurality of particles (not shown, but inherently included in the pathways because every material is composed by plurality of particles);

one or more electrically conductive contact pads (104, 106) integrally molded with the matrix (column 7, lines 13-17).

Regarding claim 2, Glatts disclose one or more means (20, 22) for providing a flow space.

Regarding claim 3, Glatts disclose the means comprises one or more compressible microspheres imbedded in the matrix.

Regarding claim 7, Glatts disclose said means comprises one or more spaces formed between two or more of said pads.

Regarding claim 9, Glatts disclose the pathways comprises a plurality of conductive particles, and said means for providing flow space comprises one or more spaces formed between two or more of said particles.

Regarding claim 12, Glatts disclose one or more of said pathways comprises a plurality of particles aligned to form a column having at least one end, wherein one or more of said pads is in contact with at least of said ends of one or more of said columns of particles.

Regarding claim 18, Glatts disclose one or more pathways comprises a plurality of electrically conductive particles aligned in a column having at least one end particle coated with a metal (72).

Regarding claim 23, Glatts disclose one or more of said pathways comprise a plurality of conducting particles aligned in one or more columns having at least one end particle, and wherein one or more of said pads form a bond with said matrix and with one or more of said end particles.

Regarding claim 24, Glatts disclose the outer surface of the matrix comprise a first surface adapted to face one component and a second surface adapted to face a second component (94).

Art Unit: 2833

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 5-6, 10-11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glatts (US 6,019,610).

Regarding claim 5, Glatts substantially disclose the claimed invention except said means for providing flow space comprises one or more gas particles.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a gas particle into Jin et al's contact pads. Since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 6, Glatts substantially disclose the claimed invention except the gas particle are of a size of 20% or less than the size of the conducting particles.

It would have been an obvious matter of design choice to change the size of the gas particle to be 20% less than the size of the conducting particles, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Art Unit: 2833

Regarding claim 10, Glatts substantially disclose claimed invention except the pathways are anisotropic and comprise up to about 25% magnetic particles.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the pathways with anisotropic and comprise up to about 25% magnetic particles, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 11, modified matrix of Glatts disclose the plurality of the magnetic particle are aligned to formed one or more array of electrically isolated column having at least one end, wherein one or more of said pads is in contact with an end of one or more of said columns of particles.

Regarding claim 19, Glatts substantially disclose the claimed invention except the matrix comprises one or more elastomers which retains about 90% or more of its modulus of compression over a temperature range of between about -50 degree Celsius to 200 degree Celsius.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide about 90% or more of elastomer into the Jin et al's. Since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Application/Control Number: 09/465,056

Art Unit: 2833

Response to Arguments

5. Applicant's arguments with respect to claims 1-3, 5-7, 9-12, 18-19, 23-24 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Truc T. T. Nguyen whose telephone number is 703-306-4004. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on 703-308-2319. The fax phone numbers for the

Application/Control Number: 09/465,056

Art Unit: 2833

organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

T. Nguyen April 11, 2002

Modaila